Report rough plan

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Contents


```
./wordcount.sh
```

1 Sections [1/8]:

1.1 [ ] Abstract [1/1]

```
texcount abstract.tex  \
    | grep "Words in text:" \
    | tail -1 \
    | cut -d : -f2 \
    | sed 's/ //g'
```

1.2 [ ] Introduction [0/0]

```
texcount introduction.tex  \
    | grep "Words in text:" \
    | tail -1 \
    | cut -d : -f2 \
    | sed 's/ //g'
```

1.3 [X] Background [0/1]

```
texcount background.tex  \
    | grep "Words in text:" \
    | tail -1 \
    | cut -d : -f2 \
    | sed 's/ //g'
```

- ☐ Make sure all techniques used are properly documented in this section

1.4 [-] Literature Review [2/3]

```
texcount literature_review.tex  \
    | grep "Words in text:" \
    | tail -1 \
    | cut -d : -f2 \
    | sed 's/ //g'
```

- ☒ Bezier curves for route generation
- ☒ GAs for route generation
- ☐ FARNs

985

1.5 [-] Approach [1/3]

```
texcount classical_approach.tex  \
    | grep "Words in text:" \
    | tail -1 \
    | cut -d : -f2 \
    | sed 's/ //g'
```

1.5.1 [ ] Single Agent Planning [3/4]

- ☒ Population encoding
- ☒ Population generation
- ☒ Fitness evaluation
- ⊟ Genetic operators

1.5.2 [X] Multi-Agent Planning [2/2]

- ☒ Intersection Detection
- ☒ Collision Detection

1.5.3 [ ] Macro-Level Planning [3/5]

- ☒ Graph construction & Edge weighting + possible extensions
- ☒ Planning macro routes
- ☒ grouping agents into concurrent plans
- ☐ Possible extensions
- ☐ Make clear what is my original work

1.6 [ ] Results [0/3]

1.6.1 [ ] Single Agent

- ☒ population size
- ☒ number of generations
- ⊟ number of obstacles / difficulty of road space % of road space that is infeasible average number of (required) control points to plan route How close is the average fitness to optimal (straight line fitness)

1.6.2 [ ] Multi Agent

- ☒ population size
- ☒ number of generations
- ⊟ number of obstacles / difficulty of road space
- ☐ number of concurrently planned agents

1.6.3 [ ] Macro Level

- ☐ population size
- ☐ number of generations
- ☐ number of obstacles / difficulty of road space
- ☐ number of concurrently planned agents
- ☐ sparsity of graph

1.7 [ ] Evaluation [0/6]

```
texcount evaluation.tex  \
    | grep "Words in text:" \
    | tail -1 \
    | cut -d : -f2 \
    | sed 's/ //g'
```

1.7.1 [ ] Genetic Algorithms

- ⊟ Evaluation of currently implemented operators
  - ☒ Selection
  - ☒ Mutation
  - ☐ Crossover
  - ☐ Fitness

1.7.2 [ ] Bezier Curves

- ☒ Advantages
- ☒ Disadvantages
- ☒ Alternatives
- ☐ Other operators and how they may improve
- ⊟ Performance
- ☐ Reliability

1.7.3 [ ] Single agent approach

- ☐ How well did it perform?
- ☐ How could it be further improved?

1.7.4 [ ] Multi-agent approach

1.7.5 [ ] macro level approach

1.7.6 [ ] Codebase evaluation

- ☐ How much work was involved, size of codebase?
- ☐ Where does my approach fall short?

1.8 [ ] Conclusion [0/0]

```
texcount conclusion.tex  \
    | grep "Words in text:" \
    | tail -1 \
    | cut -d : -f2 \
    | sed 's/ //g'
```